

Title (en)

AIR INTAKE DEVICE FOR INTERNAL COMBUSTION ENGINE

Title (de)

LUFTEINLASSVORRICHTUNG FÜR VERBRENNUNGSMOTOREN

Title (fr)

DISPOSITIF D'ADMISSION D'AIR POUR MOTEUR À COMBUSTION INTERNE

Publication

EP 2431587 A4 20131218 (EN)

Application

EP 10774771 A 20100302

Priority

- JP 2010053308 W 20100302
- JP 2009115679 A 20090512

Abstract (en)

[origin: US2012000438A1] In order to provide a small air-intake apparatus for an internal combustion engine, which can satisfactorily control an air flow and can reduce energy loss in a rotary valve, the air-intake apparatus includes a surge tank; a first air-intake passage communicating with the surge tank; a second air-intake passage communicating with the surge tank; a casing including a first port connected to the first air-intake passage, a second port connected to the second air-intake passage, and an outlet port connected to an air-intake portion of the internal combustion engine; a rotary valve including a rotor housed in a valve casing portion of the casing to be rotatable about a rotational axis, the rotary valve being configured to control air intake directed to the air-intake portion by rotation of the rotor; and a first seal for sealing between the rotor and a surface of the valve casing portion facing the rotor with at least either one of the first port, second port and outlet port being closed.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] JP 2002130063 A 20020509 - HONDA MOTOR CO LTD
- [E] EP 2175117 A1 20100414 - AISIN SEIKI [JP]
- [X] DE 10218176 A1 20031106 - BAYERISCHE MOTOREN WERKE AG [DE]
- [X] DE 19944108 A1 20010322 - MANN & HUMMEL FILTER [DE]
- [A] EP 0636774 A1 19950201 - FIAT AUTO SPA [IT]
- [A] JP S62174529 A 19870731 - HINO MOTORS LTD
- See references of WO 2010131512A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 2012000438 A1 20120105; **US 8789508 B2 20140729**; CN 102356221 A 20120215; CN 102356221 B 20131113; EP 2431587 A1 20120321; EP 2431587 A4 20131218; EP 2431587 B1 20171018; JP 5207093 B2 20130612; JP WO2010131512 A1 20121101; WO 2010131512 A1 20101118

DOCDB simple family (application)

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